

REMARKS

New Claims 50-79 are added herein. Claims 1-79 are pending. No new matter is added as a result of the claim amendments.

Examiner's Interview

On April 20, 2005, John Wagner (Attorney for the Applicants) and Examiner Hoffman of the Patent Office participated in a telephone call to discuss the instant application. In the telephone call, Mr. Wagner requested an in-person interview with Examiner Hoffman subsequent to the submission of the instant response, but prior to the first Office Action on merits following this submission. Applicants are also submitting with this response a request for an in-person interview.

Reply to Examiner's Response to Applicants' Arguments

Applicants respectfully disagree with some of the statements in the instant Office Action (specifically, pages 9 and 10 of the Office Action).

One argument advanced by the Applicants pertains to the motivation to combine the two references (Nakagawa et al., hereinafter "Nakagawa," U.S. Patent No. 6,810,131, and Perlman et al., hereinafter "Perlman," U.S. Patent No. 6,055,316) cited in the rejection of Claims 1-49 under 35 U.S.C. § 103(a). Applicants have not per se requested a single reference that combined the concepts of progressive encryption and scalable encoding, beyond the normal expectation that such a reference should be produced if it could be found in a prior art search. Furthermore, Applicants also would have expected that if such a reference could be found than it would have been cited against the claims under either 35 U.S.C. § 102 or 103.

The Examiner claims to have found a reference (Al Jabri et al., "Secure Progressive Transmission of Compressed Images," hereinafter "Al Jabri") that shows progressively encrypting scalably encoded data. Applicants respectfully disagree. Applicants respectfully submit that Al Jabri does not show or suggest progressive encryption, and thus Al Jabri does not support a motivation for combining Nakagawa and Perlman.

According to the instant application, "progressive encryption is defined as a process which takes original data (plaintext) as input and creates progressively encrypted data (ciphertext) as output, where the progressively encrypted data has the property that the first portion can be decrypted alone, without requiring information from the remainder of the original data; and progressively larger portions can be decrypted with this same property, in which decryption can require data from earlier but not later portions of the bitstream. Progressive encryption techniques include, for example, cipher block chains or stream ciphers. These progressive encryption methods have the property that the first portion of the data is encrypted independently, then later portions are encrypted based on earlier portions" (see at least page 14, lines 22-33, of the instant application).

In other words, with progressive encryption according to an embodiment of the present invention, a portion (e.g., a first block) of scalably encoded data is encrypted to generate a first block of encrypted scalably encoded data. In such an embodiment, additional scalably encoded data (e.g., a second block) is then encrypted together with (in combination with) either the first block of scalably encoded data or the first block of encrypted scalably encoded data to generate a second block of encrypted scalably encoded data, and so on.

Al Jabri, and in particular the part of Al Jabri relied upon by the Examiner, only shows, for example, a first portion of data being encrypted three times, a second portion two times, and a third portion one time. However, according to Al Jabri, the portions are encrypted independent of each other. That is, for example, the first portion of data is not included in the encryption of the second portion. Furthermore, according to Al Jabri, data (in particular, scalably encoded data) is not added to, for example, the first portion as the first portion is repeatedly encrypted.

Thus, Applicants respectfully submit that Al Jabri does not show or suggest progressive encryption as recited in Claims 1-49. Consequently, Applicants respectfully submit that Al Jabri neither provides nor supports a motivation for combining Nakagawa and Perlman. Nevertheless, to further distinguish certain features of the claimed invention, new Claims 50-79 are added herein.

Applicants also respectfully disagree with the statements in the instant Office Action to the effect that, if two references are classified in analogous arts according to the U.S. Patent Office (PTO) classification system, then there is support for combining the two references. Applicants respectfully note that the prior art search is expected to include references that are analogous to the present claimed invention. The fact that such a search produced two references (Nakagawa and Perlman) from the same class would not be unexpected. Applicants respectfully submit that this does not provide or support a suggestion or motivation to modify or combine references identified from such a search – because two references are analogous does not make it obvious to combine them to make the claimed invention.

In addition, regardless of whether or not the Nakagawa and Perlman references are analogous, Applicants have argued (and continue to argue) that progressive encryption of scalably encoded data, as recited in the claims, was not implemented by those skilled in the art prior to the invention, and this fact provides evidence that it is not obvious to combine Nakagawa and Perlman.

103(a) Rejections

Claims 1-8, 12-28 and 32-49

The instant Office Action states that Claims 1-8, 12-28 and 32-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakagawa in view of Perlman. The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 1-8, 12-28 and 32-49 is not anticipated nor rendered obvious by Nakagawa and Perlman, alone or in combination.

Applicants respectfully submit that there must be some suggestion or motivation to combine Nakagawa and Perlman. Applicants respectfully contend that there is no such suggestion or motivation in either Nakagawa and Perlman. Perlman makes no mention of encoding or compressing data. Nakagawa appears to only describe encryption in terms of scrambling. Applicants respectfully disagree with the statement in the instant Office Action that element 1108 of Nakagawa (Figure 15) is an encrypter. Element 1108 is a sign inverter used for scrambling data.

Applicants respectfully disagree with the statements in the instant Office Action that it would have been obvious to one of ordinary skill in the art to combine the teachings of Nakagawa and Perlman. Applicants respectfully submit that, at the time of the claimed invention, it was not

obvious to combine the teachings of Nakagawa and Perlman. Applicants respectfully submit that the existing level of ordinary skill in the art at the time the claimed invention was made is summarized in the background art section of the instant application. As described therein, the prior art was problematic for many reasons, which can be generally summarized as a lack of capability to scale (e.g., transcode) data in a secure manner. It is reasonable to infer that these problems would not have persisted had the claimed invention been obvious. Instead, those of ordinary skill in the art continued to encounter the disadvantages of the prior art without obvious solution. Applicants respectfully assert that the fact that progressive encryption of scalably encoded data, as recited in the claims, was not implemented by those skilled in the art prior to the invention provides evidence of the nonobviousness of the present claimed invention.

Applicants respectfully submit that, even in combination, Nakagawa and Perlman at best only describe a method or system that is described by, and shares the problems of, the prior art described in the background art section of the instant application.

Specifically, Applicants respectfully submit that Nakagawa and Perlman (alone or in combination) do not show or suggest progressive encryption of scalably encoded data, nor packetization of progressively encrypted scalably encoded data, as recited in independent Claims 1, 13, 21. Also, Applicants respectfully submit that Nakagawa and Perlman (alone or in combination) do not show or suggest decrypting a packet containing progressively encrypted scalably encoded data, as recited in independent Claims 33, 39 and 44.

Therefore, Applicants respectfully submit that Nakagawa and Perlman (alone or in combination) do not show or suggest the embodiments of the present claimed invention recited in independent Claims 1, 13, 21, 33, 39 and 44, and that these claims are considered patentable over Hamanaka and McGough (alone or in combination). Because Claims 2-8, 12, 14-20, 22-28, 32, 34-38, 40-43 and 45-49 depend from Claims 1, 13, 21, 33, 39 or 44 and contain additional limitations that are patentably distinguishable over Nakagawa and Perlman (alone or in combination), these claims are also considered patentable over Nakagawa and Perlman (alone or in combination). Therefore, Applicants respectfully submit that the basis for rejecting Claims 1-8, 12-28 and 32-49 under 35 U.S.C. § 103(a) is traversed.

Claims 9-11 and 29-31

Claims 9-11 and 29-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakagawa as modified by Perlman and further in view of Van der Auwera et al. ("Van der Auwera;" U.S. Patent No. 6,532,265). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 9-11 and 29-31 is not anticipated nor rendered obvious by Nakagawa, Perlman and Van der Auwera, alone or in combination.

As presented above, Applicants respectfully submit that Nakagawa and Perlman, alone or in combination, do not show or suggest the embodiments of the present claimed invention recited in independent Claims 1 and 21. Claims 9-11 are dependent on Claim 1 and recite additional limitations. Claims 29-31 are dependent on Claim 21 and recite additional limitations.

Applicants respectfully submit that Van der Auwera does not overcome the shortcomings of Nakagawa and Perlman. Applicants respectfully submit that Van der Auwera, alone or in combination with Nakagawa and Perlman, does not show or suggest progressive encryption, progressively encrypting data, or decrypting progressively encrypted data, as recited in the independent claims.

Therefore, Applicant respectfully submits that Nakagawa, Perlman and Van der Auwera, alone or in combination, do not show nor suggest the present invention as recited in independent Claims 1 and 21, and that these claims are considered patentable over Nakagawa, Perlman and Van der Auwera (alone or in combination). Because Claims 9-11 and 29-31 depend from Claim 1 or 21 and contain additional limitations that are patentably distinguishable over Nakagawa, Perlman and Van der Auwera (alone or in combination), these claims are also considered patentable over Nakagawa, Perlman and Van der Auwera (alone or in combination). Therefore, Applicants respectfully submit that the basis for rejecting Claims 9-11 and 29-31 under 35 U.S.C. § 103(a) is traversed.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-49, and new Claims 50-79, overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

WAGNER, MURABITO & HAO LLP

Date: 5/23/05


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Attachment: PTOL-413A, "Applicant Initiated Interview Request Form"



PTOL-413A (05-03)

Approved for use through xx/xx/xxxx. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 09/849794 First Named Applicant: Susie J. Wee
Examiner: B. Hoffman Art Unit: 2136 Status of Application: Pending

Tentative Participants:

(1) J. Wagner (2) B. Hoffman

(3) _____ (4) _____

Proposed Date of Interview: TBD Proposed Time: TBD (AM/PM)

Type of Interview Requested:

(1) Telephonic (2) Personal (3) Video Conference

Exhibit To Be Shown or Demonstrated: [] YES NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rejections</u>	<u>Cl. 1-49</u>	_____	[]	[]	[]
(2) _____	_____	_____	[]	[]	[]
(3) _____	_____	_____	[]	[]	[]
(4) _____	_____	_____	[]	[]	[]

[] Continuation Sheet Attached

Brief Description of Arguments to be Presented:

Applicants wish to further discuss the motivation to combine the cited prior art references and to demonstrate further how the present claimed invention is distinguished from those references.

An interview was conducted on the above-identified application on _____.

NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

(Applicant/Applicant's Representative Signature)

(Examiner/SPE Signature)

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.